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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SMITH, MARCUS	
ART UNIT	PAPER NUMBER
2419	
MAIL DATE	DELIVERY MODE
12/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/623,133	VARSA ET AL.	
	Examiner	Art Unit	
	MARCUS R. SMITH	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,7-11,13,15-17,20-25,27,29,31 and 33-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,5,7-11,13,15-17,20-25,27,29,31 and 33-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/08 has been entered.

Response to Amendment

2. The amendment filed on 10/14/08 has been considered but is ineffective to overcome the Huang and Deshpande references.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 27, 31, 34, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Hannuksela et al. (US 2002/0105951).

With regard to claims 27 and 34, Hannuksela teaches: A streaming server for transmitting a packet stream to a client device, said streaming server comprising:

a signaling engine for transmitting pre-decoder buffer parameters (page 4, paragraph 48: the server transmit a signal to the client about the buffering parameter of the media stream) to ensure the client is able to play out the packet stream without buffer violation when the packet stream is transmitted over a constant delay, reliable transmission channel (page 3, paragraphs 25 and 33 teaches data being transmitted over a zero delay transmission network); and for receiving information indicative of an aggregate of the client's pre-decoder buffering parameters (page 4-5, paragraphs 49 and 51: After the clients adjusts its parameters, it sends a signal that implicitly informs the server about its adjusted parameters.) and a jitter buffer (page 3, paragraph 35: It teaches how the pre-decoder buffering is combined with delay jitter buffering, thus the jitter buffer must be included in the pre-decoder buffer.)

With regard to claims 31 and 35, Hannuksela teaches: wherein the information indicative of the aggregate buffering parameters received by the server includes at least one of the following: information regarding a size of the client's pre-decoder buffer, information regarding a pre-decoder buffering period, (page 4-5, paragraph 49)and information regarding a post-decoder buffering time (page 4, paragraph 46).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-2, 4-5, 7-11, 13, 15-17, 20-25, 29, 33, 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hannuksela et al. (US 2002/0105951) in view of Harumoto et al. (US 2002/0004840).

With regard to claims 1 and 13, Hannuksela teaches: A method for receiving a packet stream at a client, comprising: receiving from a server pre-decoder buffering parameters (page 4, paragraph 48: the server transmit a signal to the client about the buffering parameter of the media stream) to ensure that the client is able to play out the packet stream without buffer violation when the packet stream is transmitted over a constant delay, reliable transmission channel (page 3, paragraphs 25 and 33 teaches data being transmitted over a zero delay transmission network); and transmitting to the server information indicative of an aggregate of the pre-decoder buffering parameters (page 4-5, paragraphs 49 and 51: After the clients adjusts its parameters, it sends a signal that implicitly informs the server about its adjusted parameters.) and the jitter buffer (page 3, paragraph 35: It teaches how the pre-decoder buffering is combined with delay jitter buffering, thus the jitter buffer must be included in the pre-decoder buffer.

Hannuksela discloses all of the subject matter as described above except for estimating packet stream transfer delay variation and estimating parameters of a jitter buffer based on the packet stream transfer delay variation.

Harumoto teaches similar system of a client and server network. The terminal has a reception buffer and a decoder buffer (see figure 2) for receiving video stream. The terminal sends its buffer and transmission capacity (buffer and jitter size: s_target), and its time delay (packet stream transfer delay variation) to the server to increase or decrease the transmission speed (see page 6, paragraphs 131-132). But before it sends that information to the server, it must determine or calculate (estimate) that capacity and delay (step s101: page 8, paragraphs 151-153).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to calculated the delay and calculated size of buffer based on the delay (page 7, paragraph 140) as taught by Harumoto in the system of Hannuksela in order to provided high quality video and audio in a more a efficiently manner (Harumoto, paragraph 22).

With regard to claim 2, Harumoto teaches: wherein the pre-decoder buffering parameters received are chosen based on variable bit-rate characteristics of the transmitted packet stream and the buffering (411) applied by the server (page 7, paragraph 0142-0143).

With regard to claims 4, and 20 Hannuksela teaches: wherein the information indicative of the aggregate buffering parameters is transmitted to the server at beginning of a new streaming session (page 5, paragraph 51).

With regard to claim 5, Harumoto teaches (see figure 5)

determining parameters of the jitter buffer based on the estimated packet stream transfer delay variation during a streaming session (step s107) and transmitting an

aggregate of the pre-decoder buffering parameters and the changed jitter buffer during the streaming session (step s108: page 8, paragraph 159).

With regard to claims 7, 29, 33, 36, 37, Harumoto teaches:

wherein the streaming server is adapted to optionally consider the information indicative of the client's chosen pre-decoder buffering parameters in rate control and/or rate shaping (page 7, paragraph 0143: the packet assembling circuit of server performs rate controlling steps for the data stream.)

With regard to claims 8, and 21, (see claims 31 listed above in the 102(e) rejection).

With regard to claims 9, and 23, Hannuksela teaches: wherein the aggregate buffering parameters is transmitted to the server in a Real-Time Streaming Protocol (RTSP) request message (paragraph 41: Since the client to server signal is based RSTP, any RTSP message can be used to transmit the buffering parameters.).

With regard to claims 10 and 24, Hannuksela teaches: wherein the aggregate buffering parameters is provided to the server in an RTSP PLAY request message ((paragraph 41: Since the client to server signal is based RSTP, any RTSP message can be used to transmit the buffering parameters.).

With regard to claims 11 and 25, Hannuksela teaches: wherein the aggregate buffering parameters is provided to the server in an RTSP PING request message (paragraph 41: Since the client to server signal is based RSTP, any RTSP message can be used to transmit the buffering parameters.).

With regard to claim 15, Hannuksela teaches: further comprising a post- decoder buffer for storing media data after decoding (page 3, paragraph 22).

With regard to claims 16 and 17, Hannuksela teaches: wherein the pre-decoder buffer and the jitter buffer are implemented as a single buffer unit (see claim 1).

Response to Arguments

7. Applicant's arguments with respect to claims 1-2, 4-5, 7-11, 13, 15-17, 20-25, 27, 29, 31, 33-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS R. SMITH whose telephone number is (571)270-1096. The examiner can normally be reached on Mon-Thurs: 7:30 am - 5:00 p.m. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 12/17/08

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2419
12/17/08